

# Notice of Allowability

Application No.

09/538,663

Examiner

STEFANOS KARMIS

Applicant(s)

JAKOBSSON ET AL.

Art Unit

3693

## - The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 29 June 2009.
2. ☒ The allowed claim(s) is/are 1,4-6,8-10,12,13,15,16 and 21-26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

### THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Stefanos Karmis/  
Primary Examiner, Art Unit 3693

**EXAMINER'S AMENDMENT**

1. The following communication is in response to Applicant's amendment filed 29 June 2009.
2. Claims 1, 4-6, 8-10, 12, 13, 15, 16, and 21-26 are allowed.
3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David E. Shifren, Reg. No. 59,329 on 20 August 2009.

The application has been amended as follows:

1. (Currently amended) A computer-implemented method for preventing receipt by receivers of unwanted electronic mail messages (email) sent by senders in a communication system, comprising the steps of:

determining whether email to a particular receiver comprises valid message authentication code (MAC) information;

filtering out at a gateway of the communication system email directed to the particular receiver that does not comprise valid MAC information; ~~and~~

providing the particular receiver with email directed to the particular receiver that comprises valid MAC information;

determining if a particular sender is a registered sender of email to the particular receiver, wherein the particular sender becomes a registered sender by satisfying a requirement; and

registering the particular sender when the particular sender is determined not to be a registered sender of email to the particular receiver;

wherein the step of registering the particular sender comprises the steps of:

establishing by the particular sender a cookie which indicates to the particular receiver whether the particular sender has satisfied the requirement to allow the particular sender to become a registered sender to the particular receiver;

establishing an address related to an address associated with the particular receiver which will inform the particular sender that the particular receiver desires that the particular sender be able to send email to the particular receiver; and

establishing by the particular receiver a key which is forwarded to the particular sender by the particular receiver to inform the particular sender that the particular sender is authorized to send email to the particular receiver and is now a registered sender and for use by the particular sender whenever the particular sender wishes to send email to the particular receiver;

wherein said step of establishing the address comprises generating a pseudorandom function with a keyed hash function using an input number comprising a unique serial number for use in generating an identifier for email between the particular sender to the particular receiver;

wherein each of said steps is performed by one or more computers.

2. (Canceled)

3. (Canceled)

4. (Previously presented) The method recited in claim 1, wherein said step of establishing an address comprises sending email from the particular receiver to the particular sender using public key encryption.

5. (Previously presented) The method recited in claim 1, wherein said registering step further comprises sending to the particular user by the particular receiver, an encrypted key wherein the encrypted key is a member of a set of encrypted keys.

6. (Original) The method recited in claim 5, further comprising the step of storing the encrypted key by the particular sender in a table of encrypted keys for use by the particular sender whenever the particular sender desires to send email to the particular receiver.

7. (Canceled)

8. (Currently amended) The method ~~of~~ recited in claim 1, wherein the step of determining whether email comprises valid MAC information comprises comparing the MAC against a value determined by the particular receiver.

9. (Previously presented) The method recited in claim 1, wherein the step of determining whether email comprises valid MAC information comprises comparing the MAC to an available header in an address of the particular receiver, in the received email message, whereby the MAC is not a valid MAC if the MAC and the header are not identical.

10. (Currently amended) A ~~server~~ computer system for preventing receipt by receivers of unwanted electronic mail messages (email) sent by senders in a communication system, comprising:

a memory device for storing a plurality of modules; and  
at least one server computer configured to implement said plurality of modules;  
said plurality of modules comprising:

a determining module for determining whether email to a particular receiver comprises valid message authentication code (MAC) information;

a filtering module for filtering out at a gateway of the communication system email directed to the particular receiver that does not comprise valid MAC information;

a provisioning module for providing the particular receiver with email directed to the particular receiver that comprises valid MAC information; and

a registering module for determining if a particular sender is a registered sender of email to the particular receiver, wherein the particular sender becomes a registered sender by satisfying a requirement;

wherein the registering module is also for registering the particular sender when the particular sender is determined not to be a registered sender of email to the particular receiver; and

wherein said registering module further comprises a generator for generating a pseudorandom function with a keyed hash function using an input number comprising a unique serial number for use in generating an identifier for email between the particular sender to the particular receiver.

11. (Canceled)

12. (Currently amended) The ~~server~~ system recited in claim 10, wherein said registering module sets up an encrypted address for sending email from the particular receiver to the particular sender using public key encryption.

13. (Currently amended) The ~~server~~ system recited in claim 10, wherein said registering module sends to the particular user by the particular receiver, an encrypted key wherein the encrypted key is a member of a set of encrypted keys.

14. (Canceled)

15. (Currently amended) The ~~server of~~ system recited in claim 10, wherein said filtering module compares the MAC against a value.

16. (Currently amended) The ~~server~~ system recited in claim 15, wherein the filtering module compares the MAC to an available header in an address of the particular receiver, in the received email message, whereby the MAC is not a valid MAC if the MAC and the header are not identical.

17-20. (Canceled)

21. (New) A computer readable medium having instructions stored thereon, which when executed by a computer cause the computer to prevent receipt by receivers of unwanted electronic mail messages (email) sent by senders in a communication system, by the steps of:

determining whether email to a particular receiver comprises valid message authentication code (MAC) information;

filtering out at a gateway of the communication system email directed to the particular receiver that does not comprise valid MAC information;

providing the particular receiver with email directed to the particular receiver that comprises valid MAC information;

determining if a particular sender is a registered sender of email to the particular receiver, wherein the particular sender becomes a registered sender by satisfying a requirement; and

registering the particular sender when the particular sender is determined not to be a registered sender of email to the particular receiver;

wherein the step of registering the particular sender comprises the steps of:

establishing by the particular sender a cookie which indicates to the particular receiver whether the particular sender has satisfied the requirement to allow the particular sender to become a registered sender to the particular receiver;

establishing an address related to an address associated with the particular receiver which will inform the particular sender that the particular receiver desires that the particular sender be able to send email to the particular receiver; and

establishing by the particular receiver a key which is forwarded to the particular sender by the particular receiver to inform the particular sender that the particular sender is authorized to send email to the particular receiver and is now a registered sender and for use by the particular sender whenever the particular sender wishes to send email to the particular receiver;

wherein said step of establishing the address comprises generating a pseudorandom function with a keyed hash function using an input number comprising a unique serial number

for use in generating an identifier for email between the particular sender to the particular receiver.

22. (New) The medium recited in claim 21, wherein said step of establishing an address comprises sending email from the particular receiver to the particular sender using public key encryption.

23. (New) The medium recited in claim 21, wherein said registering step further comprises sending to the particular user by the particular receiver, an encrypted key wherein the encrypted key is a member of a set of encrypted keys.

24. (New) The medium recited in claim 23, further comprising the step of storing the encrypted key by the particular sender in a table of encrypted keys for use by the particular sender whenever the particular sender desires to send email to the particular receiver.

25. (New) The method recited in claim 21, wherein the step of determining whether email comprises valid MAC information comprises comparing the MAC against a value determined by the particular receiver.

26. (New) The medium recited in claim 21, wherein the step of determining whether email comprises valid MAC information comprises comparing the MAC to an available header in an address of the particular receiver, in the received email message, whereby the MAC is not a valid MAC if the MAC and the header are not identical.

4. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art fails to teach or fairly suggest a computer-implemented method for preventing receipt by receivers of unwanted electronic mail messages (email) sent by senders in a communication system, comprising the steps of:

determining whether email to a particular receiver comprises valid message authentication code (MAC) information;

filtering out at a gateway of the communication system email directed to the particular receiver that does not comprise valid MAC information; ~~and~~

registering the particular sender when the particular sender is determined not to be a registered sender of email to the particular receiver;

wherein the step of registering the particular sender comprises the steps of:

establishing an address related to an address associated with the particular receiver which will inform the particular sender that the particular receiver desires that the particular sender be able to send email to the particular receiver; and

wherein said step of establishing the address comprises generating a pseudorandom function with a keyed hash function using an input number comprising a unique serial number for use in generating an identifier for email between the particular sender to the particular receiver;

wherein each of said steps is performed by one or more computers.

Independent claims 10 and 21 are substantially similar to claim 1 and are thus allowed under similar reasoning for claim 1. Claims 4-6, 8 and 9 are allowed as being dependent off claim 1. Claims 12, 13, 15, and 16 are allowed as being dependent off claim 10. Claims 22-26 are allowed as being dependent off claim 21.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEFANOS KARMIS whose telephone number is (571)272-6744. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on (571) 272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully Submitted  
/Stefanos Karmis/  
Primary Examiner, Art Unit 3693  
20 August 2009